Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (Currently Amended). A method of detecting a ~~proliferative-related disease state that is a~~ tumor ~~or psoriasis~~ in a subject, comprising:

(a) obtaining from the subject a sample of cells suspected of being ~~in the disease state~~a tumor;

(b) detecting the level of expression of A_3 adenosine receptor (A3AR) in said sample cells; and

(c) comparing the level of said A3AR expression in said cells to a control level, the control level being the level of A3AR expression in normal cells of the same subject, or being a standard reference level for the A3AR expression which is indicative of a normal state;

wherein a difference in the level between the control and the sampled cells is indicative of ~~said disease state~~a tumor.

2 (Original). The method of Claim 1, wherein the difference is an increase in the level of the A3AR expression level as compared to the control level.

3-4 (Cancelled)

5 (Currently Amended). The method of Claim ~~4~~1, wherein the tumor is a solid tumor.

6 (Cancelled)

7 (Currently Amended). A method for determining the severity of a proliferative-related disease state that is a tumor ~~or psoriasis~~ in a subject, comprising:

(a) obtaining from the subject a sample of cells suspected of being in the disease state;

(b) detecting the state of expression of A_3 adenosine receptor (A3AR) in said sampled cells; and

(c) comparing the level of A3AR expression in said cells with a predetermined calibration curve of the level of the A3AR;

wherein the values of the calibration curve are correlated to the severity of the disease state, thereby determining the severity of the disease state of the subject.

8-9 (Cancelled)

10 (Currently Amended). A method according to Claim ~~9~~7, wherein the tumor is a solid tumor.

11 (Cancelled)

12 (Currently Amended). A method according to Claim 1, wherein the A3AR expression level is determined by detecting the level of A3AR protein~~, or A3AR protein fragment~~ in the sampled cells.

13 (Currently Amended). A method according to Claim 7, wherein the A3AR expression level is determined by

detecting the level of A3AR protein~~, or A3AR protein fragment~~ in the sampled cells.

14 (Original). A method according to Claim 1, wherein the A3AR expression level is determined by detecting the level of A3AR mRNA in the sampled cells.

15 (Original). A method according to Claim 7, wherein the A3AR expression level is determined by detecting the level of A3AR mRNA in the sampled cells.

16 (Currently Amended). A method for determining whether a patient having a disease state that is a tumor ~~or psoriasis~~ has a high probability of responding to a therapeutic treatment of the disease state by the administration of an A3AR agonist or an A3AR antagonist, the method comprising:

(a) obtaining from the subject a sample of cells associated with the disease state;

(b) detecting the level of expression of A_3 adenosine receptor (A3AR) in said sample; and

(c) comparing the level of said A3AR expression in said cells to a control level, being the level of A3AR expression in normal cells of the subject, or being a standard reference level for the A3AR expression which is indicative of a normal state;

wherein a difference in the level between the control and the sampled cells is indicative that the subject has a high

probability of responding to a therapeutic treatment by an A3AR agonist or A3AR antagonist.

17 (Original). A method according to Claim 16, wherein the difference in the level is an increase in the level of A3AR expression in the sampled cells as compared to control.

18-19 (Cancelled)